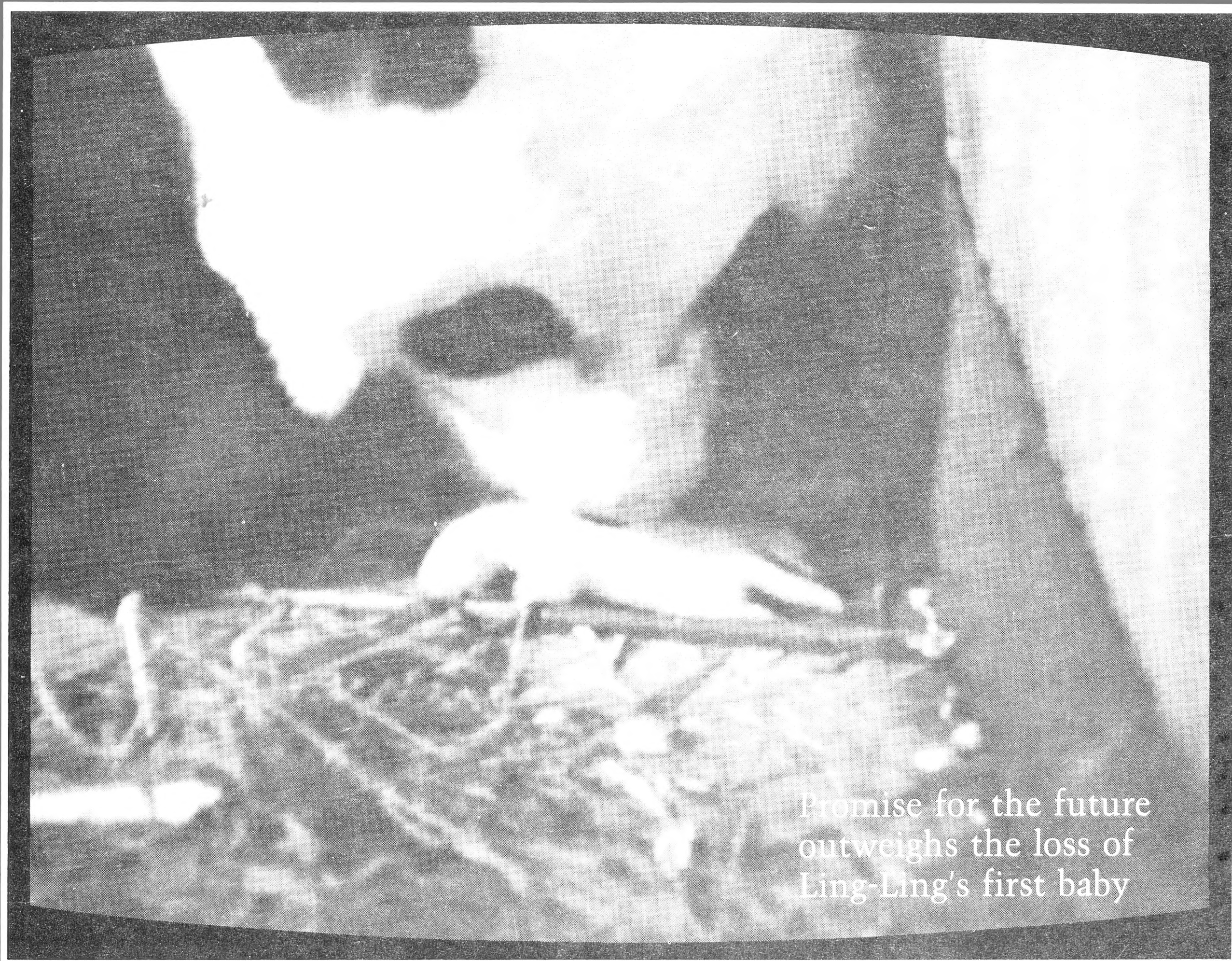


ZOOGOER

Inside: FONZ 1983
Gift Collection



Promise for the future
outweighs the loss of
Ling-Ling's first baby



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Ling-Ling's firstborn survived only a few hours, but its birth signals that she can bear young and that she knows how to care for them. (Photo from videotape, courtesy of National Geographic Society.)

1983 Panda Breeding: A Success Despite Loss of Cub

Amid international attention and concern, the National Zoo's giant panda Ling-Ling gave birth to a male infant at 3:18 a.m., July 21.

The infant survived only three hours because of pneumonia contracted in the womb. But its birth answered the question of whether Ling-Ling can have young and be a good mother with a resounding yes.

The path to this success was anything but smooth. Ling-Ling has always had strong heat periods, and Hsing-Hsing's sperm tests indicated that he could become a father. But they had seven seasons of mating attempts frustrated in various ways.

One year, Ling-Ling had a sprained leg and was unable to stand properly for mating. Another year, she was too heavy. And Hsing-Hsing has never been adept at achieving the proper mating position.

In 1980, Ling-Ling was artificially inseminated with sperm from



Keeper leader Barbara Bingham used a carrot treat to get Ling-Ling to stand up for a daily check of the panda's nipple development.



Jessie Cohen, NZP Office of Graphics and Exhibits

Collection manager Bess Frank (left) joined FONZ volunteer Helen Gaul on one of the three-hour panda watch shifts. National Geographic Society donated the video equipment used to monitor Ling-Ling, record her behavior and send a television picture back to the Education Building lobby for visitors.

Hsing-Hsing with no result. The London Zoo's male Chia-Chia came to Washington in 1981 to mate with Ling-Ling, but the two proved incompatible.

In 1982, Hsing-Hsing and Ling-Ling were put together regularly for several months before her heat period began in the hope that greater familiarity would help. No copulation, but she was artificially inseminated and had panda fans on the edges of their seats for some weeks while she exhibited pregnant-like behavior.

Eventually, it became clear that there would be no baby, and her behavior was attributed to pseudo-pregnancy, not uncommon in some groups of mammals.

1983 would be the season. . .

March 18, 1983

Ling-Ling and Hsing-Hsing mated naturally on this cold, rainy spring day. They were put together again before her heat period ended, but they did not mate a second time. Ling-Ling was also artificially inseminated March 19 and 20 with semen from Chia-Chia.

A birth was predicted to take place between mid-July and early September (recorded gestation for giant pandas ranges from 97 to 165 days).

July 11, 1983

The Panda House was closed to give Ling-Ling privacy. Tests of her urine showed increases in levels of hormones associated with pregnancy. The results were compared

to those from the female panda at the Madrid Zoo, which gave birth to twin cubs last year (Chia-Chia was the father by artificial insemination). Based on this comparison, Ling-Ling would give birth in late August.

FONZ's corps of volunteer "preg watchers" went into action when the Panda House closed, beginning their 24-hour watch in three-hour shifts. (The watch continued until July 31, with 78 volunteers contributing a total of 480 hours.)

A bank of video equipment, generously provided by National Geographic Society, was installed in the panda kitchen, the keeper work area next to the enclosures. The volunteers monitored Ling-Ling with the camera, recording significant behavior and sending a picture to the television monitor in the Education Building lobby for Zoo visitors.

July 13, 1983

Panda keeper Barbara Bingham noted during her daily check of Ling-Ling that the panda's nipples were standing out from her fur, developing as they should for an expectant mother.

Also on this day, the decision was made to stop the daily visits between Ling-Ling and Hsing-Hsing because she was becoming increasingly aggressive toward him.

July 20, 1983

3 p.m.

Panda mothers build nests to have their babies in, and Ling-Ling did

build a nest with the bamboo provided. However, she didn't build it on the wooden platform in her private den. She chose the concrete floor in the area where she is viewed by the public.

She began to get restless during the afternoon, and her vulva appeared to be wet. But, as Barbara Bingham put it, "After eight years, you learn not to get excited about anything because it could be nothing."

7:11 p.m.

FONZ volunteer Doyle Smith noted that Ling-Ling began frequent anogenital licking, another sign of approaching birth. He made the first contact with Zoo staff, calling collection manager Bess Frank. Frank called Bingham, who had also gone home for the day, and both returned to the Zoo.

8:00 p.m.

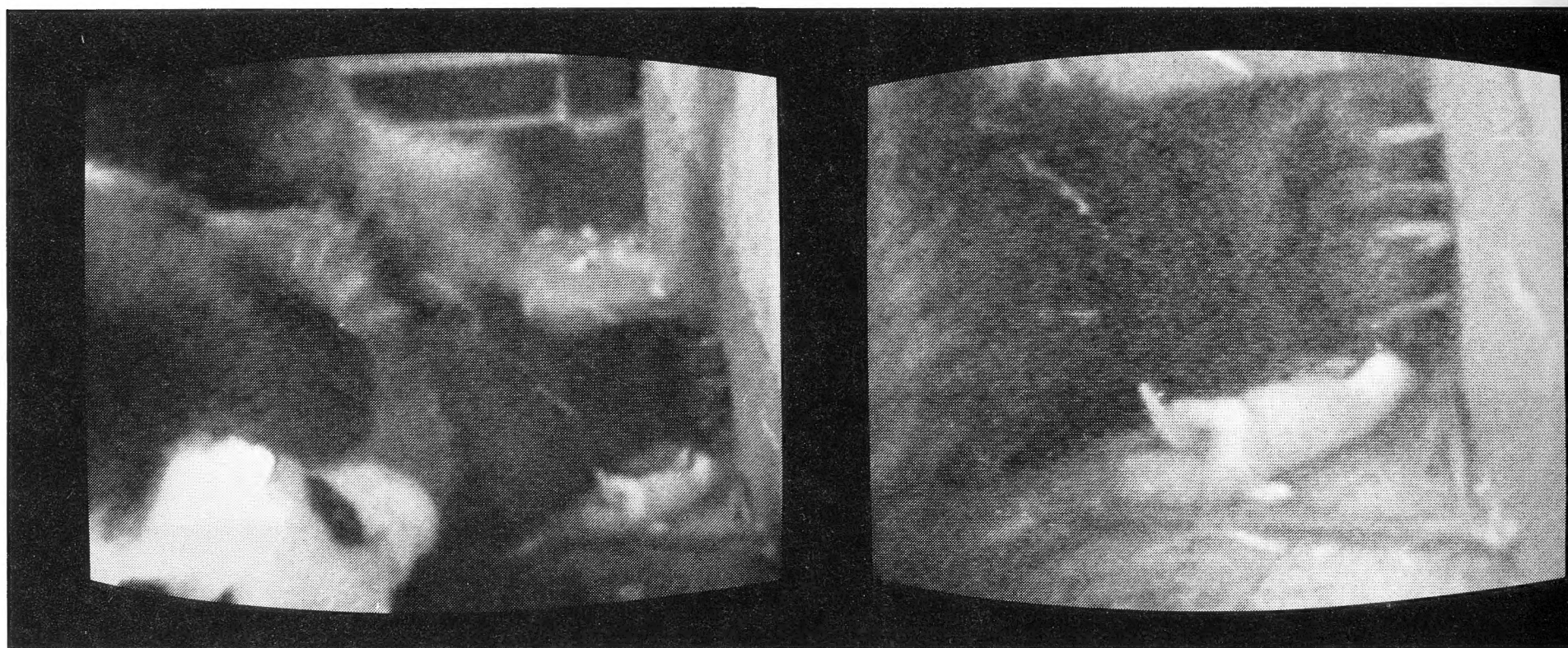
Ling-Ling was still grooming frequently, but then she added a new behavior—she grated carrots with her claws and rubbed the shreds all over her body.

She appeared restless, but she did sleep for short periods. She continued to lick herself frequently, and occasionally made moaning sounds. Although no contractions were noted, careful study of the videotapes reveals that she may have had contractions by this time.

9:45 p.m.

Some fluid was ejected from Ling-Ling's anogenital area, but the

In these scenes from the birth videotape, the baby panda is born, and Ling-Ling accidentally touches it with her foot. It cries, and she responds to its call, gently taking it into her mouth.



watchers could not identify its exact source.

July 21, 1983

1:40 a.m.

Ling-Ling had the first clear set of contractions, after some loud vocalizations.

2:10 a.m.

The second set of contractions came. But after that, Ling-Ling ate and then slept. The watchers thought this meant there was plenty of time before a birth.

3:18 a.m.

The baby panda was suddenly born, seemingly propelled out of the birth canal, after the third set of contractions (the contractions were actually getting further apart).

Ling-Ling was on her back in the birth nest. The panda in Madrid

had given birth while standing on all fours; the female that gave birth at the Mexico City Zoo in June had been sitting up.

After the other births, the mothers had taken their babies into their mouths very quickly. Ling-Ling's baby was still for an eternity of about two minutes. Then Ling-Ling touched it with her back paw inadvertently—it breathed and began to cry.

Ling-Ling immediately rose, gently picked up her baby in her mouth, seated herself and began to cradle and lick it.

FONZ volunteer Roberta Baskin was on duty: "I was really a wreck! I had done only one other shift on the watch. I was really glad that Bess and Barbara were there because they had more experience with the camera. I was afraid I'd miss taping

the birth or have the whole thing out of focus!"

Baskin says those last contractions were much more pronounced than the earlier ones. "Barbara said, 'She's going to have it!' and she had it!

"I've said this a million times now, but I just couldn't believe it. I'd be really excited and then I'd get really anxious.

"We were noting everything it did, and there was one period when it didn't do anything for about 20 minutes. I didn't feel there was anything wrong, but I was anxious to hear it make noise again. At that point, it did seem that the odds against it surviving were so high."

4:00 a.m.

It was possible that Ling-Ling would have a second infant, so



Jessie Cohen, NZP Office of Graphics and Exhibits, photographed from original videotape taken by Barbara Bingham.

careful monitoring continued.

Ling-Ling carried on maternal behavior which was called "exemplary" by Dr. Devra Kleiman, acting assistant Zoo director and reproductive specialist. Kleiman and other key Zoo staff members had arrived on the scene, and more were on the way.

The baby's vocalizations were recorded for later study, and videotaping continued. Ling-Ling carried her baby in her mouth or cradled it in her arms. The baby squirmed and squealed, quite normal for newborn pandas. (Kleiman notes that the continual loud crying serves to focus the mother's attention on the helpless youngster.)

4:45 a.m.

The Zoo public affairs staff had assembled, and press statements

were being prepared. Reporters were already calling about the birth.

The news would be carried on the morning radio and television programs, and a press conference was scheduled for 11 a.m. Calls continued to come in through the morning from news services around the country and overseas.

6:25 a.m.

Volunteer Baskin recalls that this is the moment when Ling-Ling let her baby go, and the watchers saw to their dismay that it was already dead. "She just let it go. She had been licking it quite a bit and then she let go. I was just crushed."

The baby had been vigorous and noisy, and there had been no indication of any problem developing with it or with Ling-Ling.

Zoo staff members made a move

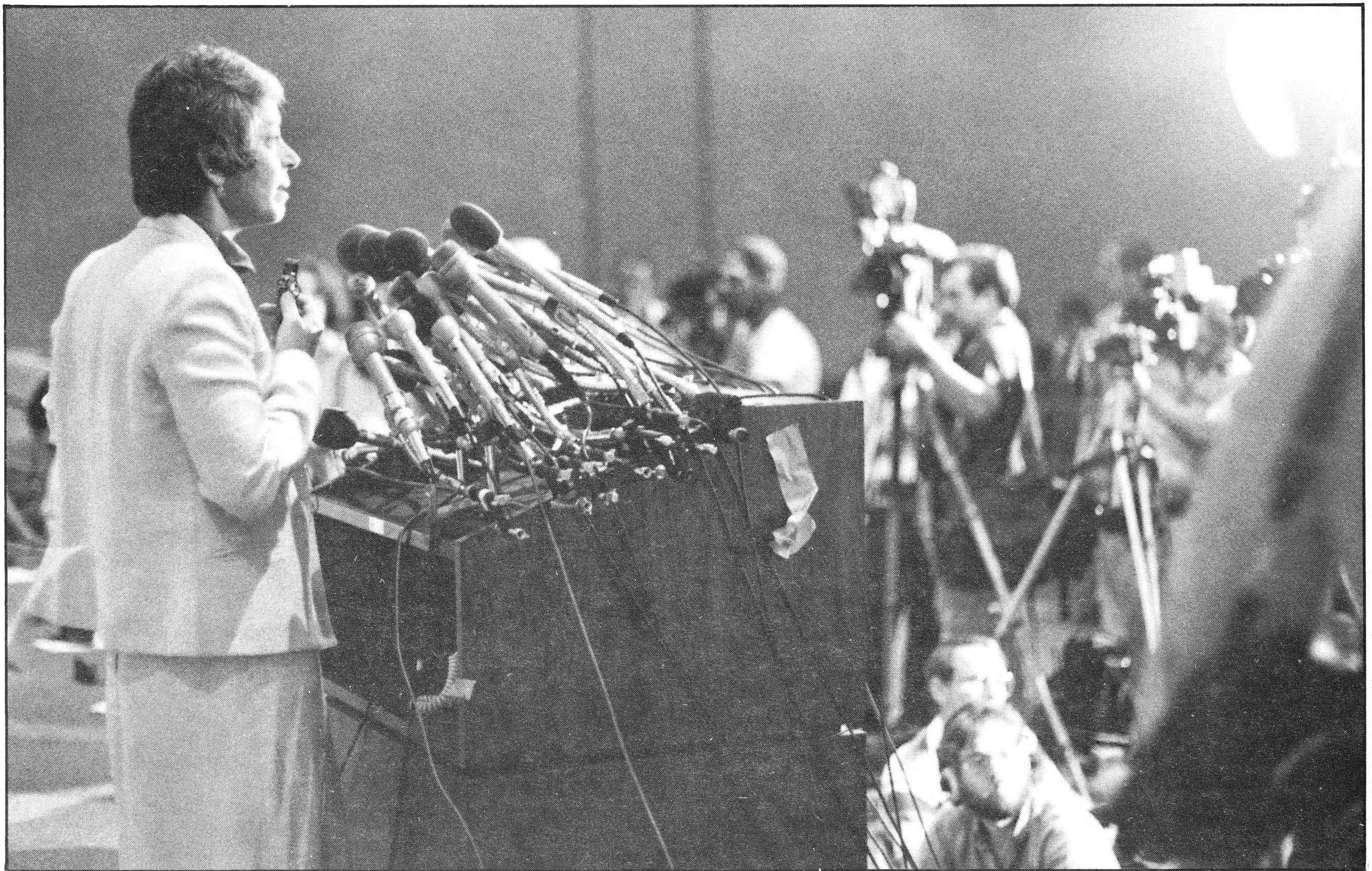
to try to get the infant so it could be examined. However, Ling-Ling heard the noise at the door of her enclosure, and she picked her baby up again.

11 a.m.

About 100 reporters came to the press conference in the Education Building. They viewed the videotape of the birth (copies were made available to them) and pressed for details on the cause of death and Ling-Ling's behavior.

Although the reporters focused on the death of the cub, acting Zoo Director Dr. Christen Wemmer looked to the future in his statement:

"Even though we lost the cub, we know Ling-Ling is capable of conceiving and giving a normal birth. We have come closer than ever



Jessie Cohen, NZP Office of Graphics and Exhibits

The birth of Ling-Ling's baby drew international press attention. Dr. Devra Kleiman gave details to the throng of reporters at the 11 a.m. press conference. The birth videotape was also shown, and copies of an edited version were distributed for broadcast.

before to successfully propagating the species.

"The loss of the first born is not an uncommon event in zoological parks or among mammals in the wild."

5 p.m.

Ling-Ling was allowed to keep her infant through the day in the hope that this experience would strengthen her maternal responses for next year. However, there is a

time limit for determining cause of death, and that information is very important for the future of panda-breeding in captivity.

The Zoo's chief veterinarian Mitchell Bush and associate veteri-

narian Lyndsay Phillips entered Ling-Ling's enclosure. When she responded aggressively to Dr. Phillips, Dr. Bush picked up the infant with a loop on the end of a metal pole.

Ling-Ling calmed down very quickly after they left, picking up an apple and cradling it.



At the press conference, FONZ volunteer Roberta Baskin told reporters of her nervousness during the birth. "I almost hoped the baby would be born on the next person's watch!"

11 p.m.

A four-hour postmortem examination of the infant performed by Zoo pathologist Richard Montali revealed that it had a general retention of fluid. A preliminary diagnosis of respiratory failure associated with excessive fluid in the lungs was made. The baby weighed 134 grams, or 4.7 ounces, larger than the normal 100 grams for panda newborns, possibly because of the fluid retention.

This increased size may have caused the infant to become lodged in the birth canal, with the extra force required to move it resulting in the forced expulsion. Although this may have caused some trauma, it was quickly ruled out as a cause of death because the infant was so vigorous at first. Also, there was no evidence of significant traumatic injury.

The autopsy also revealed that the baby had not nursed. Its stomach was found to be surprisingly small. This and other information will be useful next year, particularly if hand-rearing of an infant becomes necessary.

July 25, 1983

Microscopic examination of the tissues revealed that the baby panda died of pneumonia. The pneumonia developed in the womb and is believed to be secondary to a bacterial infection that arose in the birth canal sometime earlier. Prenatal infections like this occasionally occur in humans and have

been recorded in different species of animals.

Ling-Ling was very quiet for several days after the birth; she stayed in the nest and continued to cradle apples, sometimes two at a time. She returned gradually to her normal behavior, and she was given antibiotics in case she still harbored the infection that was passed along to her baby. Her health will be monitored closely.

National Zoo researchers studying genetics at the National Cancer Institute are examining tissue samples to try to determine whether the baby's father was Hsing-Hsing or Chia-Chia.

Spring 1984

Ling-Ling will be fourteen, and she will have four to six years left in her reproductive life.

The National Zoo and panda fans everywhere are looking forward to those few days next spring when she comes into heat. The successful mating of 1983, the birth and the gentleness and care Ling-Ling showed toward her infant all signal that there will be plenty to cheer about next summer.

And a rare and remarkable species will be a bit more secure of its place in the world with another successful captive birth.

This panda report was written by Zoo-goer editor Susan Stauffer.

The "Unseen" Zoo

by Julie Rovner

Who works at the Zoo? Well, there are keepers, of course, and veterinarians. Sometimes a visitor can spot a researcher, clipboard in hand, taking notes on an animal. And there are those who staff the parking booths, gift shops and food stands.

Yet few visitors realize that it takes hundreds of people, many of them performing unglamorous jobs, to keep the Zoo safe, clean and running. Since many of those critical workers are rarely seen, most people don't know they exist.

Tucked away in the basement of the Zoo's General Services Building (at one end of the Zoo's largest parking lot) is the Office of Facilities Management. Here the work day begins at 6 a.m., long before the first visitors arrive and even before many of the animals are up and around.

From here is dispatched a work force that includes:

Gardeners, who cut the grass and tend to the flowers;
Janitors, who keep the glass surfaces and floors in the animal buildings clean and shiny;
Truck drivers, who transport animals and food and carry provisions to the Zoo's Conservation and Research Center in Front Royal, Virginia;
Laborers, who pick up trash and manure; and
Tradespeople (painters, welders, plumbers, electricians, carpenters and mechanics) without whom the Zoo wouldn't—indeed couldn't—operate.

"We're the unpublicized ones, but we're actually the backbone of the Zoo," says Carl Jackson, superintendent of the Services

Division of the Office of Facilities Management.

George Calise, the Zoo's Assistant Director for Support Services, adds, "The public does see these people, but their work does not appear exciting, and traditionally the public takes them for granted. For that matter, society in general takes them for granted. Unless there's a strike and the trash starts to build up, you don't notice people picking up trash."

Clean floors are important to visitor safety; sparkling clean glass is important to their viewing the animals. With the variety of animal exhibits and the number of visitors here, the Zoo's janitors have their work cut out for them. Handicapped workers under contract help out with cleaning in the administrative offices. During the summer, handi-



Patrick Phillips

Making sure the Zoo is clean and fresh every day is a never-ending job for workers like Barbara McCoy and Wes Miller.

capped teenagers collect trash and do other chores.

"When the public comes in and sees everything nice and shiny, they know that the people here are proud of their work," says janitor Nathan Coppedge, a six-year Zoo veteran.

"Just as the keeper sees to it that there's a clean and healthy environment for the animal behind the glass, we make sure there's a clean and healthy environment for the visitor in front of it," adds Calise.

The landscape staff has 12 full-time employees, responsible for maintenance of the Zoo's 168 acres of ornamental trees, shrubs, grass, flowers and ground-covers. A journeyman gardener plans, plants and cares for each of seven zones within the Zoo, and specialists work with the tropical plants and the wide variety of trees. The landscape staff

works on exhibit design, interpretation and construction. Zoo landscaping is a year-round task.

"What I like best is planting," says gardener Shane Potts. "When you put a plant in the ground, you're starting a new life."

Offices, animal enclosures and especially the miles of railings in the Zoo are all painted regularly. "They keep me going all the time—you sure can't get bored," says painter Barbara McCoy, who is not only the Zoo's first woman painter but also the first woman painter in the history of the Smithsonian Institution.

McCoy, who previously worked as a cosmetologist and a hardware store manager, says what she likes best about working at the Zoo is the "outdoor atmosphere, and I'm proud of keeping things clean."

The Zoo's laborers not only move animals and furniture and do the smaller construction jobs but also collect manure and other animal waste which is trucked across town to the National Arboretum for fertilizer.

Of course, the Zoo's support staff does a lot more than pick up trash. In fact, the four departments Calise oversees—Facilities Management, Graphics and Exhibits, Construction Management, and Police, Safety and Health—comprise more than half of the National Zoo's full-time work force. The Office of Facilities Management alone has more than 100 full-time employees.

So why don't we notice these people who make the Zoo what it is? "We try to give our people visibility by putting them in the regular Zoo uniform [beige shirt with the Zoo

logo on the sleeve and brown slacks], but we don't want them to be too visible because we want the visitors to concentrate on the animals," says Calise.

In order to facilitate the work and not hinder Zoo visitors, much is done when visitors aren't here. "We try to get most of the work in the exhibit areas done before 10 a.m. or after 4 p.m.," Calise reports. "It's our goal to keep the Zoo for the visitors and the animals. We're striving to keep vehicle traffic out of the Zoo and to keep our people behind the scenes. We try to simulate, as much as possible, a natural habitat

for the animals and a natural habitat for the people in a park setting."

It's not unusual for these employees to have been with the Zoo for 12, 15 or even 20 years. And, not surprisingly, nearly all the workers genuinely enjoy what they do. "I like the open air and the environment," says Devocan Puryear, a heavy-equipment operator who's worked for the Zoo for 18 years. "Every day, there's something different."

Although Puryear now operates the forklifts that move animals (in transport crates) and feed supplies, as well as the Vac-all (a large truck

with a suction machine for removing manure from various pits around the Zoo), he began, as many of the longtime employees did, as a laborer.

The heavy-equipment operators also perform another crucial function: snow removal. Operator Jimmie Person says that it usually takes a full day to clear the snow from the miles of walkways and five parking lots.

When it snows, it's the heavy equipment operators who must make it to work no matter what, since the keepers cannot get in to feed the animals until enough snow

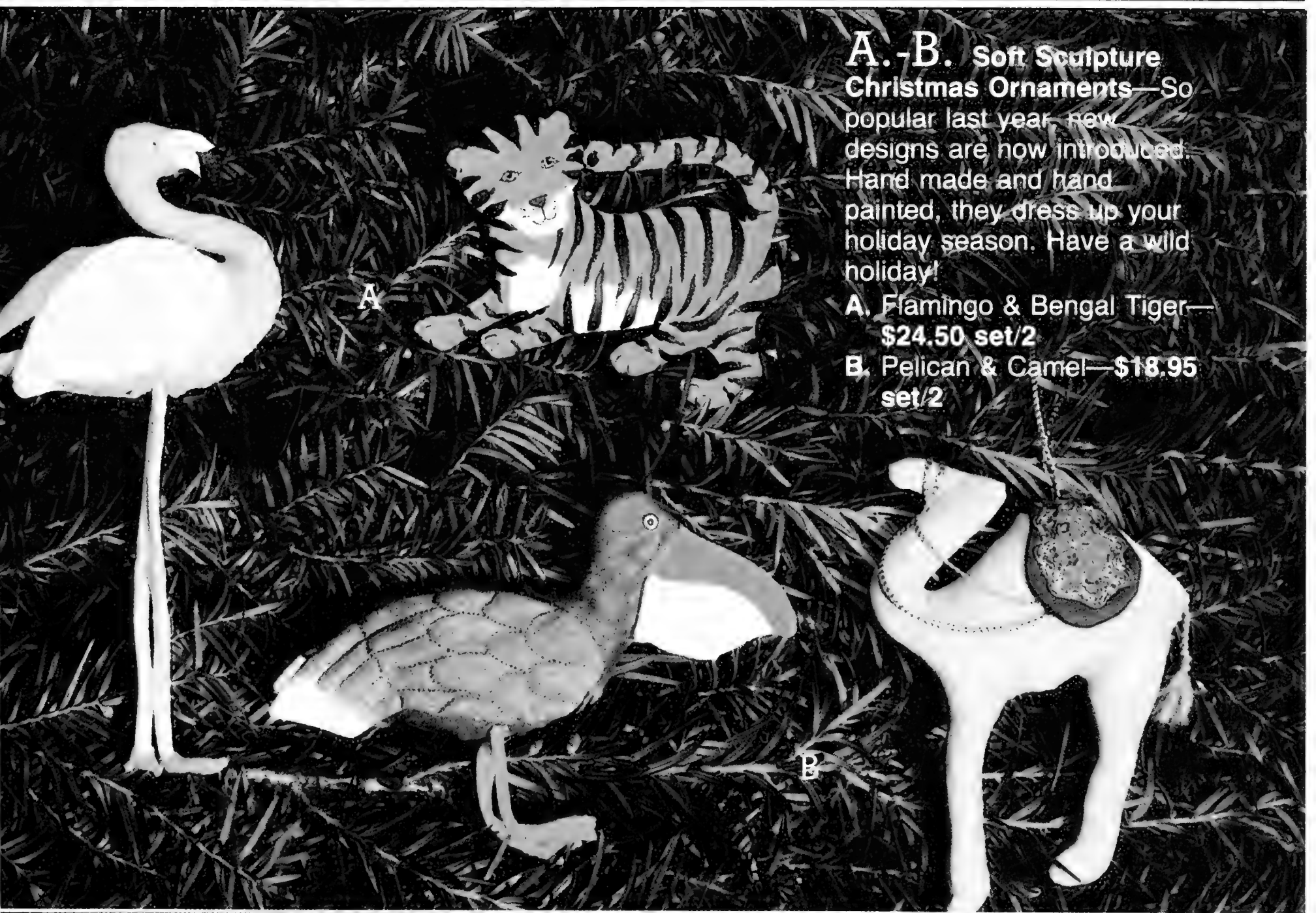


Patrick Phillips

Plantings give the Zoo its country-within-a-city atmosphere and turn animal enclosures into real habitats. Gardener Shane Potts creates a shower for some of his charges.

FRIENDS OF THE NATIONAL ZOO

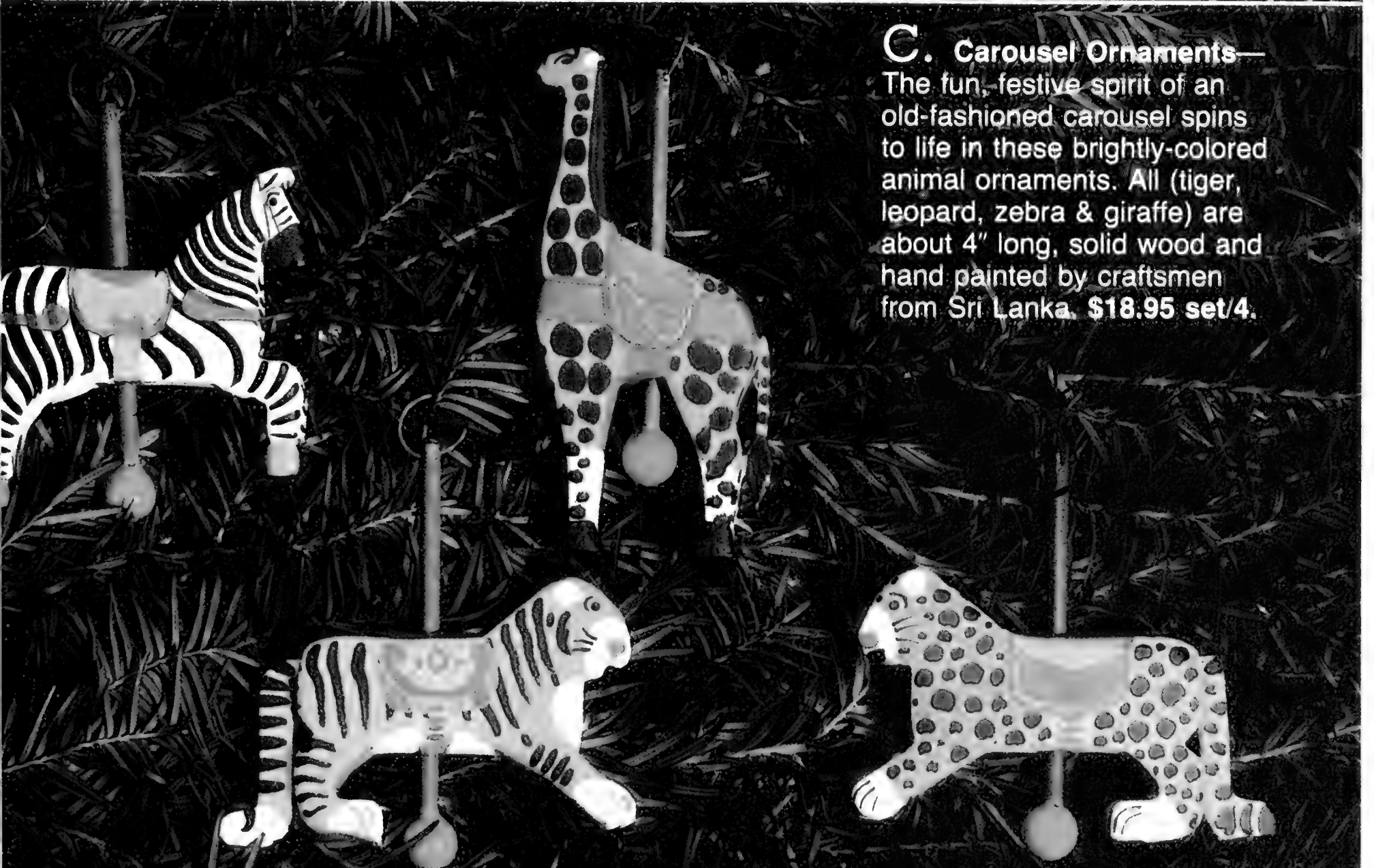
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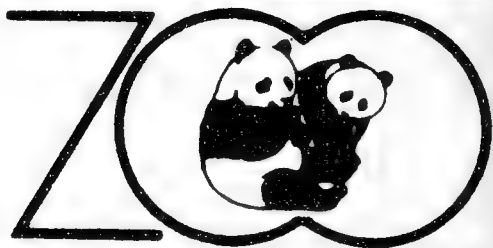
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75-up	\$7.50			Total Enclosed	

has been removed from the critical pathways. After last winter's blizzard, "We had the park open before the city was running," Person brags.

While most facilities management work makes the Zoo a safe and pleasant place for visitors, two units—the HVAC and water treatment workers—perform functions without which many of the animals literally could not survive. HVAC (short for heating, ventilation and air conditioning) sees to it that the tropical animals are kept warm in the winter while the cold-climate animals, like the polar bears and giant pandas, are kept cool during

the summer.

The water treatment staff cleans and maintains the 14 Zoo ponds. Some ponds, like the moat around the lion yard in Lion-Tiger Hill, need little care (the lions don't use it often). Other animals, however, like the seals and sea lions, live in their water environments and so they need significant attention.

The point is that no staff here works independently," says Calise. "When the Office of Animal Programs and the Office of Graphics and Exhibits are doing a new exhibit, they have to have concrete poured. They have to have steel put up and

things painted. So they have to work very closely with the Office of Facilities Management. And the designers have to consider safety and health when they design—that means safety and health for both the people and the animals.

"It's always people and animals. That's what makes us unique. When you have to tie them together, it's a real challenge."

Julie Rovner is a free-lance writer whose work has appeared in The Washington Post, Washingtonian and Zoogoer.



The Zoo has some 260 pieces of equipment for such jobs as transporting animals, mowing grass and removing snow. Kershaw Frager (left), summer employee Ian Wells (right) and Acme Vereen (far right) are among the drivers and equipment operators.

Patrick Phillips

Condors: A Different Kind of Beauty

by Jeffrey P. Cohn

Ever walked by the Beatrice Henderson flight cage below Bird House Hill and wondered about those huge, black birds inside? They're condors, Andean condors to be precise, from South America.

Like all vultures, Andean condors at first glance are not much to behold. Their heads and upper necks have no feathers, an evolutionary feature scientists think helps keep them clean and healthy while they feed on decaying carcasses.

On the ground, condors hop about awkwardly on what look like oversized feet. Their blunt talons lack the lethal force of those of hawks or eagles.

Airborne, however, Andean condors are things of majesty and power. Weighing 25 pounds or more and with a wingspan of 10½ feet, condors are the world's heaviest fliers. They can soar for hours, often covering a hundred square miles or more each day in

search of food. Their strong, curved beaks easily tear chunks of flesh from a carcass.

Adult condors have a towel-like mass of fluffy white feathers on their lower neck and a diamond-shaped patch of white on the underside of each wing, both contrasting beautifully with the birds' dominant black and grey plumage.

Andean condors once soared throughout the Andes Mountains and along the Pacific coast of South America. They were worshipped as gods by some natives and appear frequently in Latin American mythology. Even now they adorn the coat of arms of Colombia, Bolivia, Ecuador, and Chile, and they are the national symbol of Peru.

But today, the Andean condor is in trouble. Plagued by habitat destruction, killed by people who fear its appearance, and hounded from seabird nesting sites by workers who collect guano, the

condor has disappeared from areas in the north Andes. No one knows how many remain in the wild, although experts estimate there may be only a few thousand.

Their status in the wild is certainly better than that of the California condor. There are only about 20 California condors left in the wild, plus another seven in captivity. Of these, four were hatched this year at the San Diego Zoo from wild-laid eggs. They are the first captive-born California condors.

Three years ago, an amazing experiment was launched that may help the California condor. Scientists from the Patuxent Wildlife Research Center in Laurel, Maryland, the Bronx Zoo in New York and the University of Wisconsin released 11 young captive-born Andean condors in Peru. If those birds can survive in a wild area unknown to them, then California condors might also.

The Zoo's Andean condors were both hatched in 1978, the male at the Buffalo Zoo and the female at the Oklahoma City Zoo. The birds' neck ruffs have turned white as they've reached maturity. It's expected that they'll present the Zoo with young condors.

The results so far are encouraging. Seven of the 11 Andean condors are still thriving, doing everything condors of their age should do. "They're all doing fantastic," says James Carpenter, the Patuxent scientist who coordinates the program. He adds that four deaths out of 11 is about what one would expect naturally. The young condors must still, as they mature, find mates and raise young, but Carpenter is optimistic.

So, the next time you pass the Beatrice Henderson cage, stop to appreciate the Andean condors inside. This species, majestic in its own right, may be showing us how to save one of North America's rarest birds.

Jeff Cohn is a science writer whose work has appeared in Smithsonian as well as in previous issues of Zoogoer.



Jessie Cohen, NHP Office of Graphics and Exhibits

The Secret Life of an Information Aide

by Charles Byrd

"Do you know anything about animals or do you just work here?"

The words are crisp and cold, expressing a fundamental sense of doubt. I'm sitting at the front desk of the National Zoo's Education Building next to Connecticut Avenue, where almost every visitor stops for information or directions to the Giant Panda House.

As I look across the desk at the inquiring Zoo visitor, I wonder why so many people ask me that question. The answer that pops into my mind is, "That's quite correct, ma'am. Just work here, and I don't know a thing. That's why I'm sitting at the Information Desk with a T-shirt that says 'Zoo Information' on it."

But even though I've heard that question 20 times today, this particular visitor has asked it only

once and deserves a courteous answer—that's one of the things I was taught when I became an Information Aide.

Each year in early spring, several high school and college students become Information Aides to assist the Zoo's many summer visitors. We're instructed to remember that Zoo visitors have their problems, too. They may be hot, tired, hungry, lost or even just a little confused. You can be a lifesaver just by helping them find a restroom!

Although "Where are the giant pandas?" and "How do I get to a restroom?" vie for top honors as the most popular question asked at the Zoo, the Aides must do much more than familiarize themselves with the location of every animal and facility in the park.

An Aide learns the fundamentals

of zoology during classes conducted by FONZ volunteers specially trained. The Aides learn everything from the basics of bird behavior to telling the difference between an alligator and a crocodile (if you don't know how yet, you'd better ask on your next visit). And, of course, I'll never forget that the gestation period for giant pandas is four to five months and that the panda cubs at birth weigh only as much as a stick of butter.

One great precept guides the new Information Aides: Every question deserves an answer. In the case of a very specific or complex question ("How do you go about breeding reticulated pythons at the Zoo?" or "Approximately how long is a giraffe's neck, say, to the nearest centimeter?"), the Aide learns to research the answer and mail infor-



Patrick Phillips

Information Aide Charles Byrd gives young Zoo visitors a few fascinating facts about the elephants.

mation to the interested visitor.

Unfortunately, all the knowledge and discipline FONZ has instilled in me fades a bit on this Monday morning during the sweltering and crowded tourist season. I gaze at the lady who asked me if I know anything about animals and manage a polite, "Of course I know about the animals. How may I help you?"

I steel myself for the inevitable explanation of why panda bears aren't really bears and why white tigers are really white bengal tigers and not albinos. Then she asks me where the whales are!

It's surprising how many people ask for whales. Some are sure that in some hidden corner of the Zoo, not marked on any map, secret top level research is being conducted on blue whales. What a pity that Rock Creek is too small to maintain a population of oceanic mammals!

Other visitors somehow manage to see animals that the National Zoo doesn't have. I remember a particularly puzzling incident while I was on duty with the FONZ Mobile Information Cart.

FONZ developed this cart to make maps, pamphlets and a real live Information Aide available to visitors in out-of-the-way parts of the Zoo. I was initially a bit apprehensive about the cart. Questions such as "What have you got in there? Dead animals? Baby cobras?" tend to make one a bit skittish. And pushing a load of leaflets all over the Zoo's alpine trail system has a way of tenderizing the lower calf

muscles. But the chance to meet many Zoo visitors first-hand more than compensates for the extra effort.

On one particularly muggy day, though, when even the camels seemed to cherish their portion of shade, I was blessed with a taste of the truly exotic. I was approached by a woman with an enthusiastic smile who couldn't stop telling me how excited she was that she had finally seen a tapir here at the National Zoo.

She had seen several tapirs before, she assured me, at other zoos but never on any of her frequent visits to Washington, D.C. It's always gratifying to see people enjoying themselves wholeheartedly at the Zoo, and I thought this all well and good, except that the National Zoo doesn't exhibit any tapirs.

"Our tapir was sent on breeding loan to the Bronx Zoo," I put forth tentatively. "Perhaps you confused a different animal with a tapir. Sometimes animals can be difficult to see in their exhibits." I followed the now somewhat indignant woman to the yellow-backed duiker exhibit where I hesitantly suggested that this species of duiker could easily be mistaken for a tapir from a distance (the duiker wasn't on view at the moment). The woman insisted that the tapir was merely hiding in the grass!

In addition to helping visitors in the Zoo (no matter what animals they see), Information Aides respond to many telephone calls. One



The FONZ Mobile Information Cart gives visitors throughout the Zoo the chance to examine animal artifacts like orangutan hair and bird feathers.

Patrick Phillips

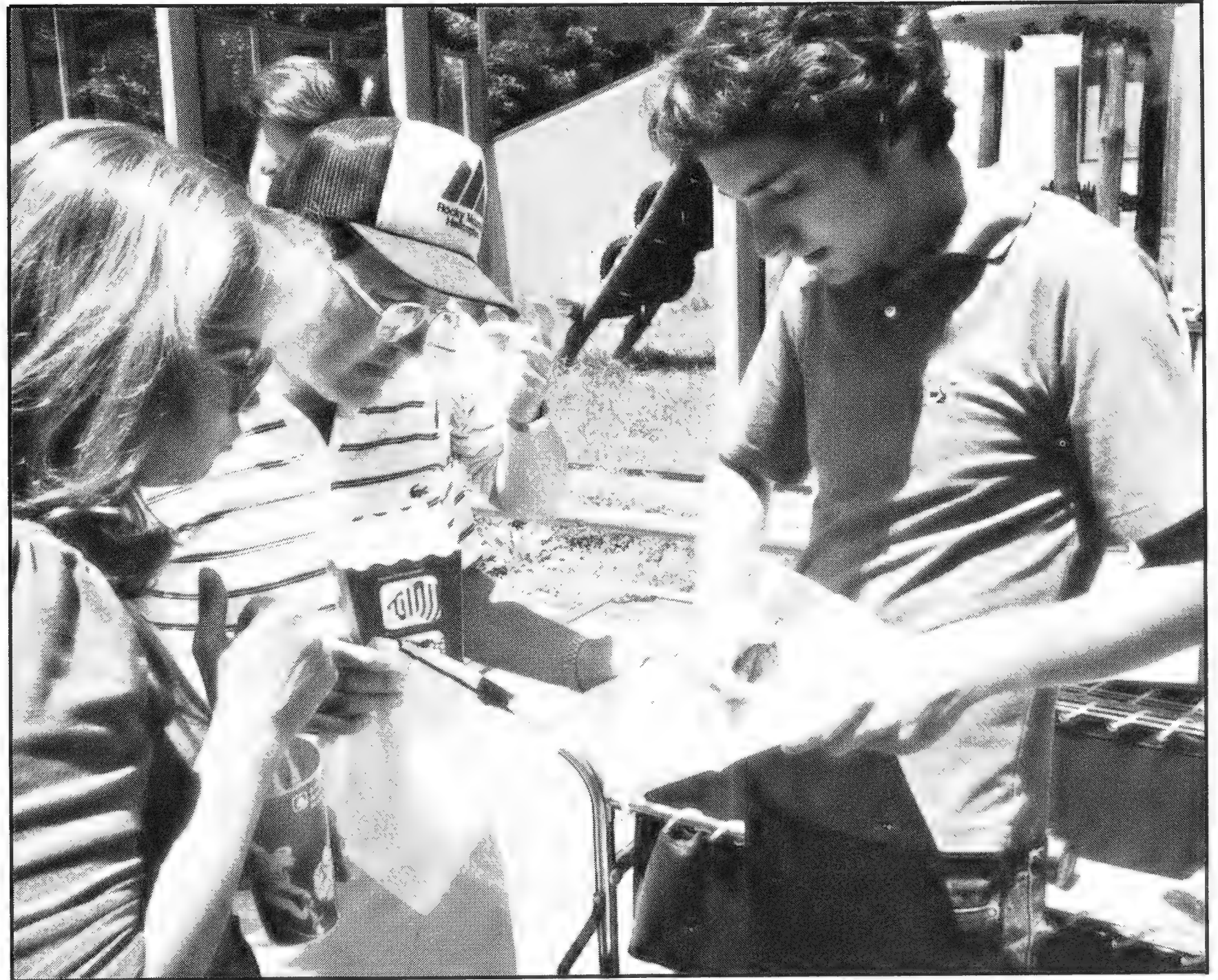
man calls me because he wants to know how to keep wild ducks out of his swimming pool. Another has raccoons nesting in his chimney. Callers may be referred to the various animal welfare agencies, or they may be put in touch with zoo keepers on more complicated questions.

Sadly, many calls come from well-intentioned but overwhelmed owners of exotic pets. A surprising number of people buy exotic pets that they simply don't know how to care for—then they expect the Zoo to help them out. How easy it is to forget that the fascinating Burmese python at the local pet store may one day reach a length of more than ten feet!

Whenever possible, Information Aides try to educate the public on the need to reduce commercial trade in exotic pets and on the responsibility an exotic-pet owner must accept.

Other calls can be a joy. It's a pleasure to talk with a man in Arizona who recommends garlic as an aphrodisiac for the giant pandas. "It's always worked with my hunting dogs," he affirms. The next caller has been told by her children that the Zoo has a two-headed giraffe. Interspersed with a dozen calls for directions to the Zoo comes an inquiry on whether we have any unicorns in our collection.

Answering the telephone at the Zoo often requires on-the-spot thinking. How do you deal with a man who calls up demanding that



Patrick Phillips

Which way to the pandas?

we send him some cheetah sperm so he can cross-breed a cheetah with his pet house cat?

One of the best things about working as a FONZ Information Aide is that I've had the chance to meet many FONZ members personally. I've reached the point where I can guess who the FONZ members are: They're usually the ones who ask the most interesting questions. Also, FONZ members usually don't make "side-splitting" jokes about a popular television personality: the "other" FONZ.

I wish I could go on, but here I am again at the Information Desk in the Education Building, and a girl just handed me a large turtle that's dripping water all over. She offers no explanation other than that she has just found it in the road (Connecticut Avenue?!). Now she hurries off. I'd better see what I can do about it.

Charles Byrd is a student at Georgetown University and has spent the last two summers working at the Zoo.

ZOO NEWS

The "Other Zoo"

No, it's not in Baltimore. It's Washington's own National Aquarium, reopened with new animals, new exhibits and exciting attractions still to come. It is located in the Department of Commerce Building with an entrance on 14th Street, N.W.

The Aquarium is now operated by the National Aquarium Society, a non-profit volunteer organization similar to FONZ. The Aquarium is the nation's first and the third oldest in the world (110 years).

Among the new features is a mini-theater offering slide shows and films on marine biology.

A Touch-Tank lets children (under careful supervision) examine and hold starfish, horseshoe crabs and other crustacea.

New graphic displays (produced by design students from American University) using exciting underwater photography show the evolution of aquatic life and the diversity of the marine world.

Some of the species on exhibit are:

- venomous lionfish and scorpion fish.
- electric eels, which can emit 350 to 600 volts.
- the gourami or "kissing fish," with its unusual diet of over-ripe bananas.



Tom Sullivan

Visitors handle sea creatures at the National Aquarium's Touch Tank.

- cannibalistic giant river shrimp.
- piranhas, which the aquarium says are "not the vicious, blood-thirsty creatures they are often reputed to be."
- lemon sharks (feeding time is 2 p.m., Monday, Wednesday and Friday).
- and beautiful Koi carp which can live 200 years.

The Aquarium is open 9 a.m. to 5 p.m. every day except Christmas. Admission is \$1 for adults and 50¢ for children and senior citizens (all admissions go to the operation of the aquarium). For information on membership benefits and the "Adopt a Fish" program, call the National Aquarium Society at 377-2826.

FONZ NEWS

Who Are FONZ Members?

A new survey reveals that FONZ members are a well-educated, middle-aged group, 62% female, committed to wildlife conservation and the work of the National Zoo:

- 62% are college graduates, and 40% have graduate degrees. Three-fourths have annual incomes of more than \$30,000.

- The mean age for all FONZ members is 35-44 years, with more than half of the Family members in this age category. The second highest age category is 25-34 with about a third each of the Individual and Couple members in this group.

FONZ members tend to be long-term Washington-area residents (Family members have lived here an average of 12 years), and 60% are married.

- Survey respondents cited "obligation to support the Zoo" and "conservation and ecology" as their chief reasons for joining FONZ. Free parking and ZooNight are the favorites among the many membership benefits.

Eight of ten members read all or part of *Zoogoer*. Other favorite reading includes *Washingtonian* and *Time*. FONZ members visited the Zoo an average of five times last year.

Annual Meeting

A special report on Ling-Ling's baby, including a showing of the birth videotape, will highlight the 1983 FONZ annual meeting

FONZ President Robert Nelson will report on the activities and achievements of the last year, and Treasurer William Bryant will provide details on finances. Newly-elected officers and board members will be installed.

The annual meeting will take place Thursday, October 20, in the Education Building Auditorium at 8 p.m.

Attention, Photographers!

The deadline for submitting entries to the Seventh Annual FONZ Photography Contest is December 31. For official rules and entry forms, please check your Fall 1983 *Wildlife Adventures* activity newsletter, or call 673-4960 to request a copy.

Prizes in the adult and junior categories include gift certificates for photographic equipment and outstanding books on photography. Winning photographs and "honorable mentions" will be exhibited in the Education Building lobby and may also appear in FONZ publications.

Help the Zoo to Flower

If you grow peonies and you're thinning out your garden this fall, save those surplus flowers for the National Zoo. Please call 673-4783 to make arrangements for bringing the flowers to the Zoo.

Next spring, the Zoo will welcome donations of day lily, shasta daisy, rudbeckia, lavender and phlox. Be sure to label your plants now.

Help Build Panda Furniture

Would you like to help the Zoo's most famous residents, Ling-Ling and Hsing-Hsing?

With your help the National Zoo is going to build new outdoor structures to increase activity and encourage more natural behavior in the giant pandas. As a FONZ member, you can be part of the actual construction effort May 10 through May 13, 1984.

FONZ volunteers will prepare and assemble the playground furniture in the outdoor yards, sort and carry tools and supplies, and fix and serve meals to the work crews. Individuals and families, men and women, young and old alike—there's an important task for everyone.

Your own participation is vital,

but donations of materials (lumber, building supplies, food and cooking implements) will also be needed.

The winter issue of the FONZ *Wildlife Adventures* brochure will have more details, including a list of needed materials and instructions on how to volunteer.

Plan now to be part of this unique—and fun—FONZ special effort!

FONZ Travel Opportunities

Space is still available on many of our 1983 and early 1984 wildlife safaris. Be sure to check your Fall 1983 *Wildlife Adventures* activity newsletter for complete itineraries, or call 673-4960 to request further information.

Amazon Cruise November 1-26, 1983

Explore the Amazon River aboard the *World Discoverer*, a cruise ship designed to travel to the world's hidden corners with the comfort of air-conditioned cabins, a theater, observation lounge, sauna and pool.

Antarctic Cruise November 24-December 17, 1983

Experts on Antarctica join this cruise of a lifetime to the remote and pristine home of fur seals, albatrosses, glaciers and towering icebergs. Special discount rates available when you sign up for both



FONZ trips give you the opportunity to enjoy and learn about the world's wildlife at very close range!

the Amazon and connecting Antarctic cruises!

India/Nepal January 13-February 3, 1984

This remarkable *shikar* (Hindu for "safari") has been planned for FONZ members to see some of the greatest wildlife sights in India and Nepal.

Australia/New Zealand/Fiji February 29-March 25, 1984

Combine koalas, penguins, hatching green turtles, geysers, glaciers, a Maori tribal feast and a glow worm grotto, and you begin to describe the believe-it-or-not wonders that abound on this three-week FONZ odyssey!

Galapagos Islands May 2-15, 1984

This two-week wildlife adventure to the "Garden of Eden" volcanic islands that inspired Darwin's theory of evolution represents the ideal itinerary, based on many recent trips. Optional extra six days in Peru exploring Lima and the Inca ruins of Machu Picchu is available.

Wildlife of Kenya August 5-24, 1984

This exciting safari to Kenya continues to be the most popular FONZ tour. Timed for the peak of the Serengeti migration, this spectacular wildlife odyssey includes riding horseback through herds of giraffe and antelope, staying in a luxury camp with a view of snow-capped Mt. Kenya, game-watching on foot with a Masai native—even an optional balloon ride over the game-filled Serengeti Plains!

Be sure to watch your FONZ publications for details on more exciting wildlife adventures planned for 1984!

FONZ photo

WHAT'S NEW AT THE ZOO?

Winter Hours

October 16 through March 31

Grounds: 8 a.m.-6 p.m.

Animal houses: 10 a.m.-4:30 p.m.

Education Building: 9 a.m.-5 p.m.

Symposium: Perceptions of Animals in American Culture

Saturday, November 12, 9 a.m.-5 p.m.

Sunday, November 13, 1-5 p.m.

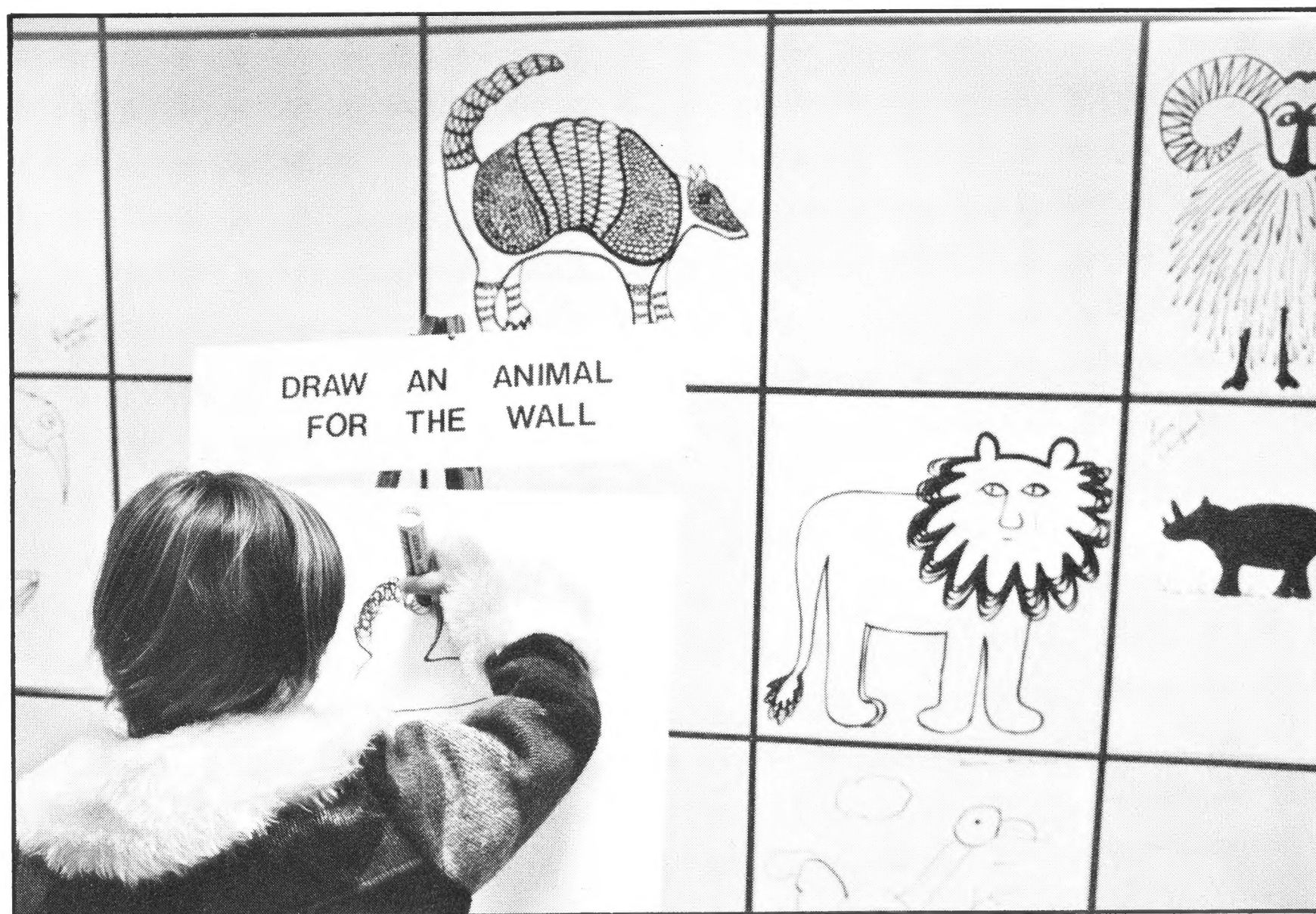
Education Building Auditorium

In this third National Zoo symposium for the public, nine animal specialists will examine how Americans view animals and how these perceptions can differ drastically from reality. Topics will include human psychological needs and their effect on perception, the use of animals in advertising and case studies of animals with "unfair" images.

Tickets for the two-day program are \$14 per person. To order, send a check or money order payable to National Zoo to "Symposium Tickets," National Zoo, Washington, D.C. 20008. A program will be sent with tickets.

Sunday Afternoons at the National Zoo

Free educational programs with Zoo staff, mid-November to mid-March. A brochure describing the individual programs will be available after November 1; call 673-4821 to request a copy.



Francie Schroeder

ZOOLab is a special place for learning and activities.

Winter Tours

FONZ offers special guided tours of the Zoo for adult and school groups. For complete information, call 673-4955.

Learning Labs

Natural objects to examine, activities to do and books to read.

• ZOOLab

ZOOLab is open by reservation only on weekdays from October through May to accommodate school groups. To schedule a group visit, call 673-4953.

ZOOLab is open to everyone on weekends from noon to 3 p.m.

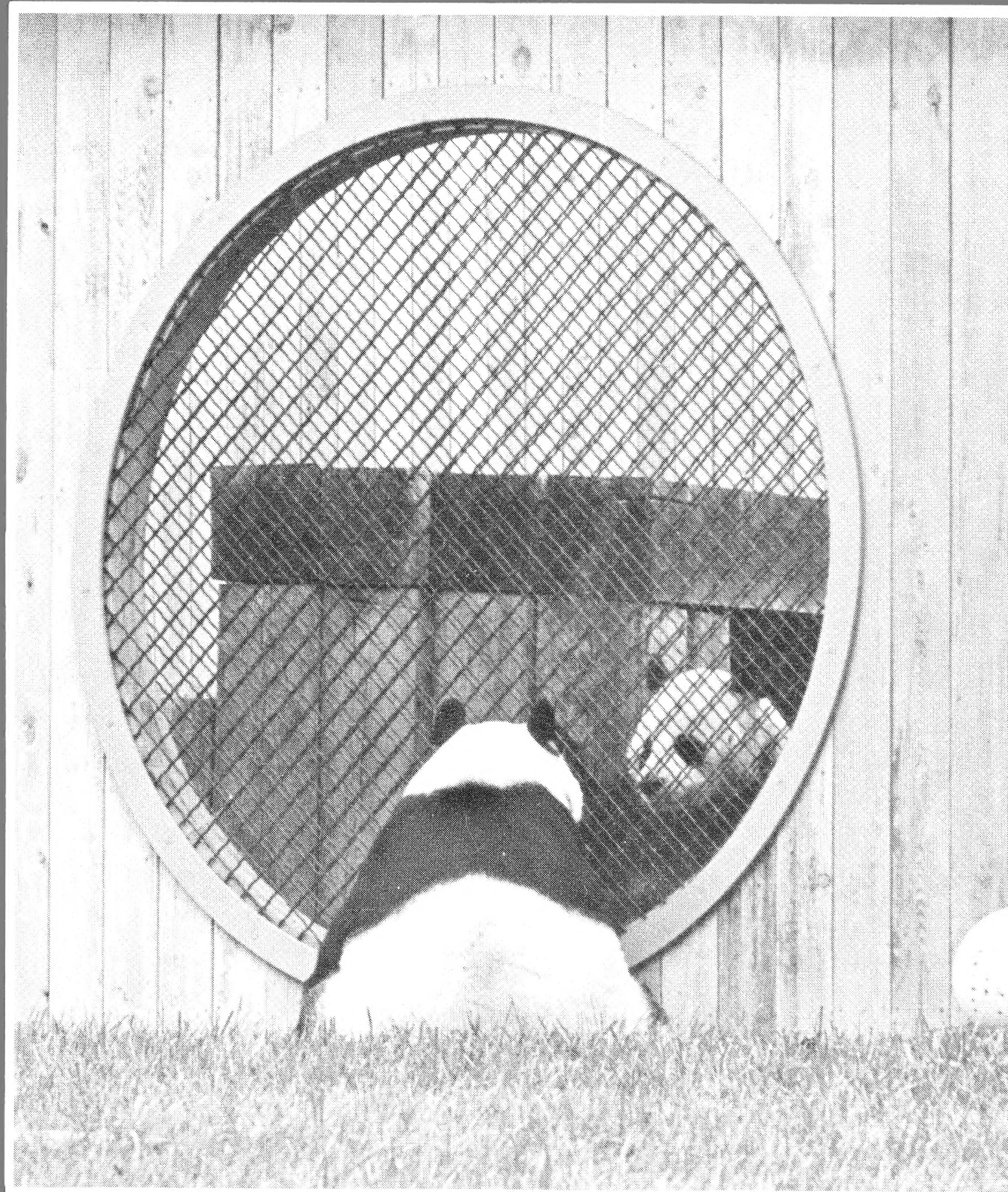
• BIRDlab

Friday through Sunday, noon to 3 p.m., Bird House. No tickets required; just walk in.

• HERPlab

Wednesday through Sunday, noon to 3 p.m., Reptile House. Free tickets available at the lab door, right in the middle of the Reptile House. For people 6 years old and up.

You can be part of an exciting project to help Ling-Ling and Hsing-Hsing—see this issue's FONZ News for details.



Francie Schroeder

**Friends of the National Zoo
National Zoological Park
Washington, D.C. 20008**

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